

Jurnal Teknologi, 35(A) Dis 2001: 13–22
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A REVIEW OF NEW BUSINESS EMERGENCE IN THE BUILDING AND CONSTRUCTION SECTOR AND RECENT AUSTRALIAN EXPERIENCE

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Abstract. This article reviews the value of new business activity to industry growth as relates to the building and construction (B&C) sector. A brief empirical analysis of the pattern of new business growth in the Australian B&C sector between 1997 and 1998 is presented herein. It is found that significant new business entry has taken place, in industries at both ends of the innovation spectrum and that further research is required to flesh-out the modest empirical work contained in this study. The findings indicate that, in particular, further research is needed in mapping the relative innovativeness of the B&C sector to more accurately interpret the value of particular patterns of new business activity; comparison of international new business growth rates; and examining longitudinal data.

Key Words: Australia, new firms, firm entry, industry growth, innovation

1.0 INTRODUCTION

New business activity is having an increasingly important impact in global knowledge economies. For instance,

... in the 1950s and 1960s it took two entire decades for one-third of the Fortune 500 businesses to be replaced. In the 1970s it took one decade to replace one-third of the Fortune 500. By contrast, in the 1980s, it took just five years for one-third of the Fortune 500 to be replaced. (Audretsch 1995, in Thurik and Audretsch 1996: 150)

This rapid pace of new business entry can have important positive impacts on industry performance. The B&C sector, still struggling to realise its potential in Australia, as elsewhere, can benefit from new business activity. The OECD recently summarised B&C sector performance as follows:

... there has been little systematic improvement in working methods and technologies. However, a strong potential for improved performance exists and it

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could, if realised, help improve productivity and reduce costs and prices (Swaminathan, 1998).

In general, the focus on new businesses was prompted by diverse literatures which highlight the pivotal role of new business activity in driving innovation and economic growth.

This paper initially provides a brief summary of the literature on the role of new businesses in economic development. Once the importance of new businesses has been established, an overview of new business activity in the Australian B&C sector is presented, based on Australian Bureau of Statistics data.

2.0 THE ROLE OF NEW BUSINESSES

The role of new businesses in promoting economic growth was first explored by economists such as Joseph Schumpeter (1942) and Alfred Marshall (1920). For Schumpeter, the exit of established businesses freed-up resources for better use by new businesses. Marshall's views compared the economy to a forest where:

‘... young trees... struggle upwards through the benumbing shade of their older rivals. Many succumb on the way, and a few only survive.’ In the end of such a natural selection process, the incumbents have to ‘give place to others, which, though of less material strength, have on their side the vigour of youth.’ (Fritsch 1996: 232).

Although some recent studies of the relationship between new business activity and economic growth show mixed results (Wagner 1996: 201; Fritsch 1996: 231), the majority of the contemporary literature on this topic tends to support the positive views of Schumpeter and Marshall.

In the early 1970s, an influential report commissioned by the US government found that:

... the health of the economy requires the birth of new enterprises in substantial number and the growth of some to a position from which they are able to challenge and supplant the existing leaders of industry (Beesley and Hamilton 1984: 217).

Examination of studies undertaken since the 1980s reveals that there is still strong empirical evidence in support of the importance of new businesses to economic growth. A recent review of international research concludes that although new businesses are generally small and have high failure rates, over time ‘they cumulate to gain a significant portion of many markets’ (Baldwin 1995: 389). This implies that

new businesses grow faster than established businesses (Baldwin 1995: 390). Indeed, a review of recently published US studies reached the same conclusion that 'business growth is negatively related to business size' (Wagner 1996: 201).

Further, a study comparing new business growth rates across industries has concluded that new businesses that are able to adjust to the competitive environment in an industry are likely to grow faster if they are in a relatively innovative industry (Audretsch 1995: 441).

Hence, if the B&C sector can lift its innovation profile, its improved performance is likely to be sustained, to some extent at least, by increased new business activity.

New businesses have also been found, on balance, to have positive impacts on efficiency, employment and innovation. A study by Geroski and Jacquemin (1985, reported in Carree and Thurik 1996: 155) concluded that industries with low levels of new business activity (and low levels of business 'exits') were likely to be 'more vulnerable to an inadequate allocation of resources, limited innovativeness, and some form of formal or tacit collusion' than industries with high levels of new business activity (and high levels of business 'exits').

Efficiency improvements arising from new business activity are related to the innovativeness of such businesses:

[new businesses] represent a 'seedbed of new activities from which will emerge the successful businesses and industries of the future (Beesley and Hamilton 1984, reported in Carree and Thurik 1996: 155).

Indeed, a major econometric investigation of the links between the internal dynamics of industries and economic performance in Canada concludes that:

... entry serves to increase productivity. It boosts efficiency. It is part of the dynamic process that serves to renew industries and to facilitate technical progress and innovation. ...Entrants are closer to the production frontier than the businesses that they replace. (Baldwin 1995: 390, 393).

Further, Baldwin (1995: 8, 397) found that new businesses 'facilitate the adaption of industry to change' and that they act as 'a conduit through which new ideas and innovation are introduced'. Baldwin's econometric analysis revealed that entry of new businesses was 'positively related to research and development'.

In a similar vein, Beesley and Hamilton (1984: 228) concluded that in the UK context new business activity 'is indeed associated with innovation and independent founders do appear to be predominantly innovative.

The entry of new businesses into an industry has also been widely associated with employment growth. Despite the possibility for negative employment impacts arising from indirect effects noted in some studies, it appears that generally

speaking, the emergence of new businesses is associated with significant employment growth (Fritsch 1996: 232-234). Indeed:

... because the setting up of a new establishment implies taking up new activities, it seems to be more or less obvious that new establishments lead to an increase in job supply growth (Fritsch 1996: 232).

Further, a West German study based on longitudinal data from over 2 million businesses revealed that 'the entry of establishments was the driving force of trend employment growth' (Boeri and Cramer 1992: 545).

Finally, it appears that global trends toward deregulation are magnifying the opportunities for new businesses and the extent of benefits such as those described above (Anonymous 1997; Obel 1986; Levinson 1985).

3.0 NEW BUSINESSES IN THE BUILDING AND CONSTRUCTION SECTOR

The research supporting this article failed to locate a previous study of new businesses in construction. Carree and Thurik (1996) present details of 44 studies of the determinants of business entry and exit, spanning the period 1962 to 1994 and covering over 10 countries (Carree and Thurik 1996: 157-161), of which none focus on non-manufacturing industries. Carree and Thurik (1996: 156) claim that their study of the retailing sector in The Netherlands is the first study globally to examine new business entry in a non-manufacturing industry.

Despite the absence of any studies of new businesses in the construction industry, some observations can be made. The efficiency, innovation and employment benefits discussed above will arise primarily from the activities of the most innovative new businesses, hence, in the construction context, fewer benefits may arise from the large number of business entries and exits in the 'construction trade services' industry. Professional consultants, suppliers of machinery and equipment, and construction contractors are likely to provide higher value and more innovative output.

Further, there is some literature on new business entry to mature markets – which is relevant to the construction industry. This literature emphasises that:

... it is important to develop an understanding of business entry to new market segments of mature industries due to the prominent role of entrants in the renewal and growth of such industries (Abernathy and Clark 1985, reported in Swaminathan 1998: 389-390).

An extensive study in this field recently conducted by Swaminathan (1998: 389) concludes that the dynamics underlying the entry of new businesses into mature

markets are most likely to be driven by 'discontinuities in an industry's environment', relating to innovation and changes in client behaviour. Swaminathan conceptualises discontinuities as exogenous forces impacting on the industry.

Marceau et. al. (1999) note that the B&C sector is experiencing a period of discontinuity which is likely to be shaping growth in the industry. They note that new business entry is being driven by discontinuities in relation to:

- rapid technological and organisational change in the industry (innovation);
- procurement process changes (client behaviour);
- regulatory changes;

and that once entry is established, the key factors underpinning business growth are:

- continuing innovation; and
- the establishment of extensive business networks.

The studies undertaken on new business activity in the Australian B&C sector are with a view to shedding light on this important element of the sector's innovation and growth performance. The focus is on the location of new business activity within the sector, given that growth in more innovative industries such as industries undertaking more complex, higher value-adding processes is likely to be more self-sustaining and provide a greater contribution to improving the overall efficiency of the sector, than growth in less innovative industries.¹

4.0 NEW BUSINESS ENTRY TO THE B&C SECTOR

The information presented in the foregoing paragraphs is based on unpublished data collected by the Australian Bureau of Statistics (ABS) on 40 industries which contribute to the operation of the B&C sector. The data are drawn from the ABS business register and reveal the number of management units in each industry. By comparing the number of management units in each industry in 1997 and 1998 an indication of the level of new business entry in each industry was gained. Technically, this is *net* entry, as business exits will also affect the data. For small and medium sized businesses, a management unit is likely to equate with the business e.g, the sole proprietor, partnership or incorporated company. Larger businesses may have separate management units for each of their major divisions, so that in this case growth in management units does not necessarily reveal new business activity.

The identification of relevant industries was based on relatively narrow three and four-digit ANZSIC (Australian and New Zealand Standard Industrial Classification) industry definitions in many instances in an effort to include only those activities relevant to the B&C sector.

Across the 40 industries selected 14,357 new businesses emerged between 1997 and 1998 (Figure 1). The construction trade services industry accounted for 4,379 of these businesses (30 per cent). However, the trade services industry is relatively unlikely to contain a high proportion of innovative businesses compared to other industries undertaking more complex, higher value-adding tasks. New business growth in this industry may contribute less to the sector's performance than similar growth in more innovative industries.

The computer services industry accounted for 2,839 new entrants, equivalent to 20 per cent of the new businesses. However, the computer services industry serves a broad array of industries and only a relatively small proportion of growth is likely to be related to construction although the precise proportion is difficult to gauge.

Excluding the trade services and computer services industries, 7,139 new businesses entered the B&C sector between 1997 and 1998. One fifth of these entrants were in the consulting engineering services industry. This is a very positive result as this industry is likely to be highly innovative compared to other industries in the sector undertaking less complex tasks.

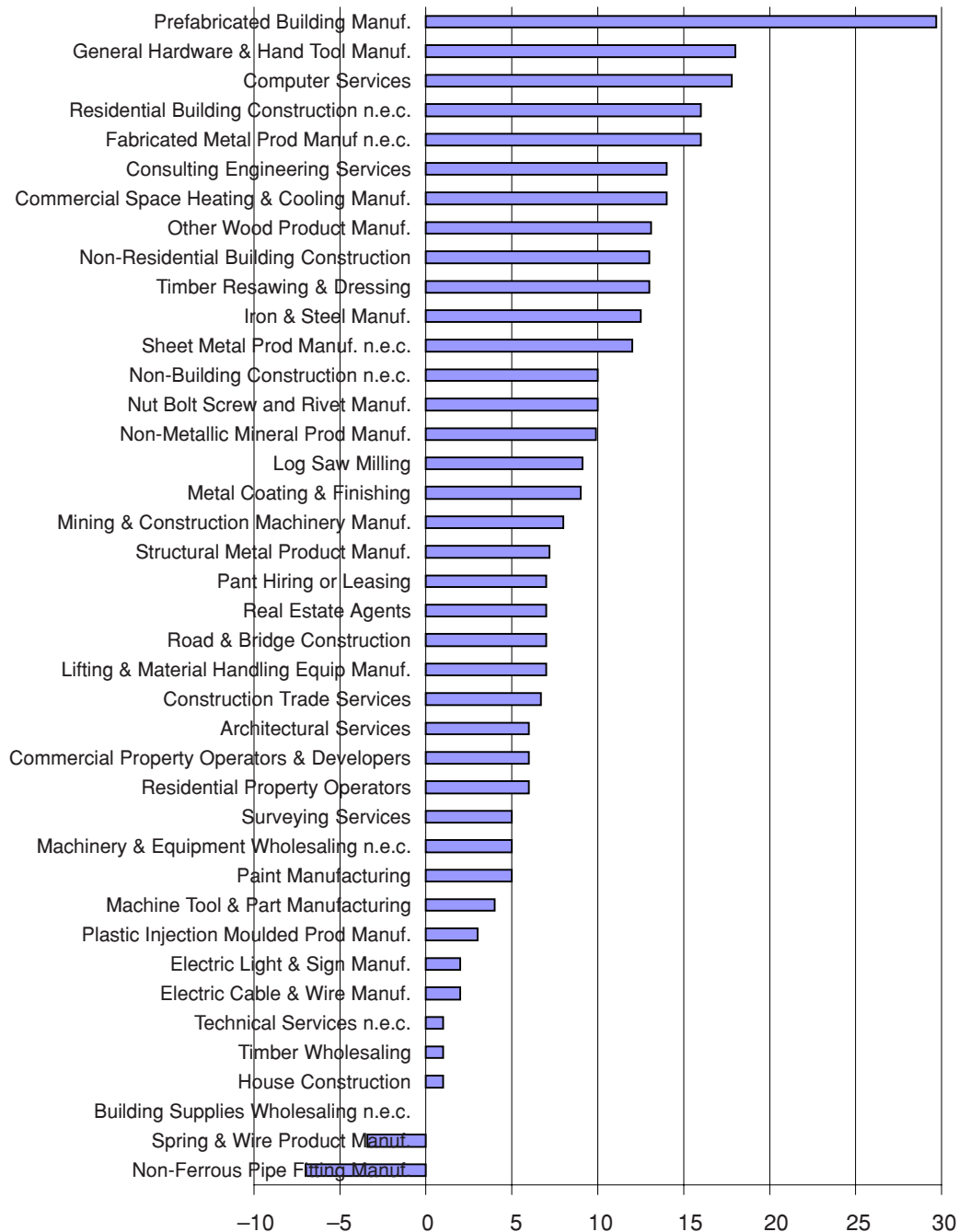
Figure 1 reveals the percentage growth of the number of businesses in each of the 40 industries between 1997 and 1998. The data indicates that three industries namely, building supplies wholesaling, spring and wire products and non-ferrous pipe fittings, showed zero or negative growth between 1997 and 1998. On the other hand, five industries grew by more than 15 per cent over the period shown. One of these was the computer services industry, which grew 18 per cent, however as noted above, it is difficult to determine to what extent such growth involved businesses servicing the B&C sector.

The activities of the other four industries showing growth greater than 15 per cent are largely dedicated to the B&C sector. These were prefabricated buildings, hardware and hand tools, fabricated metals, and residential building. All of these industries, except residential building, are manufacturing industries. This is a positive trend as manufacturers supplying the B&C sector have been shown to play a central role in promoting innovation within the sector:

... forces for change are particularly strong among materials and components manufacturers who are often in a position to invest in long-term research and new product development. Such firms invest far more in R&D than contractors or design organisations. Value-added in construction is increasingly being produced up-stream in the supply chain by components manufacturers, who have invested in capital-intensive production processes (Gann 1997: 9).

New business activity in the construction industries comprising the sector is now reviewed. Of the five construction industries shown in Figure 1, residential (non-house) building, non-residential building and non-building construction all showed

Figure 1: Percentage Growth (by Number of Businesses) of ANZSIC Industries Contributing to the B&C Sector, 1997 to 1998



relatively strong growth in number of businesses over the period. The road and bridge construction industry grew at the median rate for all industries. House construction had the fourth lowest growth rate of all the industries shown.

In terms of total number of businesses, the housing industry is by far the largest in this group, with the road and bridge construction industry being the smallest. The other three industries shown were roughly the same size. Overall, the four largest construction industries showed very similar growth in the number of businesses, as shown in the Table 1.

Table 1: Net Growth in Number of Businesses,
Construction Industries, 1997 to 1998

Construction Industry	Net Growth
Residential	388
Commercial	381
Housing	302
Engineering (Non-Building)	291
Road and Bridge	65

The number of new businesses in house construction is only comparable with the other three largest industries shown because of the very low growth rate in the housing industry over the period.

Given that the size and sophistication of construction projects tends to increase moving from housing, to residential, to commercial, to engineering construction, the housing industry can be considered the least innovative.² Therefore, the low percentage growth in new businesses in the housing industry shown in Figure 1 is less concerning than if it had been one of the other construction industries performing that poorly.

Given the high-value adding characteristics of the professional service industries, it is unfortunate that of the four professional service industries shown in Figure 1, only the engineering services industry grew by more than the median rate for all industries.

A detailed comparison on the growth performance in the professional service industries is shown in Table 2. The results illustrate that the engineering services industry performed very well, being the equal sixth fastest growing industry of the 40 industries reviewed in Figure 1.

Table 2: Net Growth in Number of Businesses,
Professional Service Industries, 1997 to 1998

Industry	Growth
Engineering Services	1485
Architectural Services	409
Surveying Services	93
Technical	32

CONCLUSIONS

The literature review undertaken for this paper has highlighted the considerable importance of new business entry for industry growth. It was also noted that new business growth in more innovative industries is more valuable in terms of productivity and employment growth, than new business growth in less innovative industries.

The empirical work undertaken for this paper is a modest beginning to analysing the B&C sector's new business performance. In absolute terms, one-third of new business growth in the Australian B&C sector between 1997 and 1998 occurred in the trade services industry. This industry is probably at the lower end of the innovation spectrum for the sector suggesting that such growth would be more useful in more innovative industries in the sector.

Nevertheless, evidence has been presented suggesting that some of the fastest growing B&C industries in Australia are also likely to be the more innovative industries. This finding bodes well for the future of the Australian sector, however longitudinal analysis will need to be undertaken to get a picture of trends.

Further research could also usefully take the form of international comparisons of new business growth rates. Finally, efforts to map the relative innovativeness of the B&C industries are needed. This would be valuable as an important input to analyse new business growth patterns within the sector and likely repercussions.

ACKNOWLEDGEMENT

The authors would like to thank the Australian Department of Industry, Science and Resources for funding this project.

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- (i) This is not to deny the value of rapidly growing new business activity in any industry making up the sector
 - (ii) Innovation drivers, such as those related to project complexity, which are active in other construction industries can be absent in the housing industry.

¹ This is not to deny the value of rapidly growing new business activity in *any* industry making up the sector.

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